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ABSTRACT

This publication provides an overview of the most recent ideas on psychological stress and ways to reduce it, with particular attention to the impact of stress on administrative personnel. Major sections of the publication focus on the nature of the educational administrator's job, definitions of stress, responses to stress, consequences of stress, sources of stress, and ways of coping with stress. Although the discussion is aimed primarily at educational administrators, it is equally applicable to administrative personnel in other fields as well. (JG)

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OSSC BULLETIN

BEYOND STRESS TO EFFECTIVE MANAGEMENT

by
Walter H. Gmelch

Oregon School Study Council
Vol. 20, Nos. 9 and 10
May-June 1977

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PREFACE

Most school administrators today are victims of an unrelenting pace complicated by incessant stressful incidents. While a certain amount of stress is necessary if one is to function, the body should have adequate time to pull itself together between major stress events. Otherwise, continual crises cause wear and tear on the body to the point of emotional and physical exhaustion.

In his monograph, Beyond Stress to Effective Management, Dr. Walter Gmelch has analyzed the frenzied pace facing many administrators, defined stress, and reviewed how we respond to stress. He deals with the physical and psychological consequences of stress and recommends how we can best cope with stress. In one section, Dr. Gmelch describes stress absorbers which can help relieve the shock associated with pressure-filled events.

While the monograph is addressed to leaders in education, it will be of equal value to administrators and managers in any field.

Kenneth Erickson
Executive Secretary
Oregon School Study Council

ACKNOWLEDGMENTS

My sincere appreciation is extended to Meyer Friedman, M. D., Director of the Harold Brunn Institute for Cardiovascular Research and co-author of Type A Behavior and Your Heart, who brought to hundreds of Oregon school administrators a new awareness of stress and its impact on their ability to live longer and more fulfilling lives. His highly professional and warmly personable lectures raised our level of consciousness and stimulated many to preventative action.

Continuing gratitude is expressed to M. Roberts Grover, M. D., Associate Dean of the University of Oregon Medical School, for assisting elementary principals, secondary principals, and superintendents alike to cope with the stresses of life. Bob Grover's "stress tank" concept and workshops are well-known throughout the state and appreciated by all.

A special note of thanks to Wally Tharp and Andrea Heid who made this monograph possible.

Walt Gmelch
May, 1977

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I. Introduction

Educational leaders in the 1970s are faced with more pressure, more aggression, more change, and more conflict than in any other decade in the twentieth century. More is crammed into an administrator's day than ever before, thanks to computers, intercoms, dictaphones, and other "time-saving" devices which have measurably increased the pace of lives.

Conflict, anxiety, frustration, and aggression have crept into people's lives with few outlets in work or leisure to relieve their pressures. A document published in 1972 by the Department of Health, Education and Welfare concluded that numerous work aspects account for mental disorders and physiological diseases, including heart attacks, hypertension, cancer, and other health problems [26]. The document observed that causal factors correlating work conditions with both mental and physical health problems are often ignored. This correlation is too convincing to dismiss. It is the subject of excessive stress or "exstress" and "well-being" which is the primary concern of this Bulletin.

Within the realm of education, superintendents are popularly identified as those individuals most susceptible to stress, probably because of the nature of their managerial responsibilities. This exclusive assumption, however, is open to question. Certainly other groups of educators are equally exposed to the pressures of stress. Some evidence exists, for instance, that coronary heart disease is more common among middle managers than executives. In fact, a recent issue of Business Week reported that challenges to executives often are stimuli rather than stresses, and it is the 35-year-old administrator caught between several levels of management who is a more likely candidate for "executive diseases" [46].

Ask any educator which aspect of responsibility causes the most worry and anxiety, and virtually 90 percent will probably reply: people. Classroom management, capital expenditures, projects, reports, and perennial meetings--all involve people. If the main task of educators is to create an environment in which all people work to the mutual benefit of themselves and others, then people must be healthy to function effectively, and educators must be concerned about health--both theirs and that of others for whom they are responsible.

An overwhelming amount of information has been compiled about stress: over 80,000 articles have been written about stress, 1,000 research projects have been done, and every year 6,000 more publications are catalogued under the heading of stress. The word stress is one with which the layman and professional alike is familiar. People encounter it every day. However, for all the name familiarity that exists, at times their awareness of stress is like the emperor with the new clothes: they presume stress is there, but are not insightful enough to make it visible so they can address and cope with the problem.

In an attempt to bring about a greater awareness of the most common menace of our society, five basic questions about stress are addressed:

1. What is stress?
2. How do people respond to it?
3. What are the physical and psychological consequences?
4. What are the sources of stress?
5. How do people effectively cope with stress?

The foremost authority on stress, Hans Selye, points out that despite everything that has been written and said about stress and coping behaviors, there is no ready-made stress formula that will suit everyone [36]. Since people's thresholds and responses are different, the best a monograph on stress can do is to explain the

mechanisms of stress, outline its causes, and suggest ways which may be helpful in reducing the normal stresses of life. The intent here is to raise the level of consciousness so that tensions can be recognized before or as they occur! In the words of an honorable Chinese philosopher:

Before it move, hold it
Before it go wrong, mold it
Drain off water in winter before it freeze
Before wheat grow, sow them to the breeze
You can deal with what has not happened, can foresee
Harmful events and not allow them to be.

In sum, the aim of this Bulletin is to provide an overview of the most recent ideas of stress, and to present plans of action for its reduction. In order to make this presentation meaningful to practicing administrators, certain schematic presentations have been utilized. People wishing to study the subject in detail are referred to the literature listed in the bibliography at the end of the Bulletin.

II. The Setting

What does an educational manager's typical day consist of? The following scenario may depict what an educational manager such as a principal does on any given day. Early a.m. begins with the sound of the alarm, a hurried breakfast, a quick kiss to spouse and kids, and the harried push-and-shove commute to the office just in time to arrive prior to the staff and students. If the principal is lucky, the early arrival permits a cursory perusal of the day's tasks, commitments, and committee meetings.

Planning time is abruptly interrupted by the onslaught of urgent calls, crises, or calendar changes. Five cups of coffee, four

teacher drop-ins, three committee meetings, two irate parents, and one call from the superintendent later, the principal realizes that it's time to grab a sack lunch and gobble it down on the way to the next appointment.

The afternoon is productive but hectic, saved by the dismissal bell which signals the beginning of relatively quiet, contemplation time. But alas, a parent conference, faculty emergency, and student discipline problem have all coveted the principal's late afternoon schedule.

In the evening, family commitments come second to the endless school and community meetings, clubs, and social events that an educational manager is expected to attend. Monday through Friday is spent reacting to the urgent demands of parents, teachers, students, and the central office, while Saturdays, Sundays, and evenings seem to be the only times a principal can keep up with the paper work and/or ponder future plans in a more pro-active rather than reactive stance.

Principals love people, and that is why they <u>are</u> principals, but the stress headache and activated peptic ulcer at the end of a frenzied day makes them wonder whether being a principal isn't hazardous to their health. The problem with being a principal is that often too many responsibilities are accepted and allowed to grow and evolve into over-demanding roles--of controller, disciplinarian, motivator, persuader, fire-fighter, preserver of the culture, curriculum specialist, or parent surrogate--and the principal becomes a role prisoner rather than a person.

The preceding scenario may provide meaning and recollection to many principals and educational managers. What is the general nature of administration which makes it so stressful? Researchers probably know more about "the motives, habits and most intimate arcania of the primitive peoples of New Guinea or elsewhere than [they] do of the denizens of the executive suites . . . " [28:7]

However, Mintzberg's research of managerial activities provides interesting insights into what managers do--not in the traditional sense of planning, controlling, organizing, evaluating, and so on--but in terms of activities which make up the day. Of particular significance to the problem of administrative stress is the fact that work is characterized by 1) an unrelenting pace; 2) brevity, variety, and fragmentation; and, 3) preference for live action [28].

The Unrelenting Pace

Very few breaks are taken during normal office hours as educational managers rush through reviewing the mail (an average of 36 pieces per day), receiving telephone calls, attending meetings (8 per day), and other hurried activities which consume every spare moment of time from their early arrival to late evening departure. The only time for coffee is during meetings, while lurch is almost always taken to formal or informal meetings.

Presumably one of the major reasons for this unrelenting pace is the open-ended nature of an educational manager's job. The perpetual preoccupation with work results from never having "the pleasure of knowing, even temporarily, that there is nothing else to be done." No matter what type of administrative responsibility there is, there always seems to be a gnawing preoccupation with the feeling that there is always more to be done.

Brevity, Variety, and Fragmentation

Managers average 36 written and 16 verbal contacts each day, each contact dealing with a distinct and separate issue. Telephone calls average 6 minutes, uninterrupted desk work 15 minutes, unscheduled meetings 12 minutes, and scheduled meetings over 1 hour. This type of fragmentation and brevity challenge the effectiveness of "managers" in the true sense of the word.

Morning activities cannot be distinguished from the afternoon's work. Even the same activities that are done daily do not take

place at a special time during the day or on specific days of the week. While certain monthly and quarterly cycles do exist in education as in other types of organizations, specific activity schedules, such as a time in the morning for planning, probably do not exist.

Thus, the brief encounter with each activity, the variety of activities, and the lack of an activity pattern require administrators to shift gears quickly and frequently. In effect, they are susceptible to developing a stress-ladened profile. Managers rush from one project or task to another, day by day, and week by week, rarely receiving satisfaction from tangible, completed objectives.

Live Action Preference

Administrators typically are attracted toward the more active tasks of work, preferring activities that are current, specific, well-defined, and non-routinized. The administrative environment typically is one of a stimulus-response reaction, which does not enable administrators to gravitate toward effective planning, reflective thought, or other potentially stress-reducing strategies.

To a great degree, therefore, the administrator's work is characterized by an unrelenting pace, brevity, variety, fragmentation, and live action--all contributing to managerial stress. Subsequent sections of this Bulletin are designed to broaden knowledge and understanding of what stress is, how people respond to it, what the consequences are, and how to cope with it.

III. What Is Stress?

The feeling of stress is one people can easily recognize. It is as much a part of people's lives as joy, happiness, love, pain, and other feelings of euphoria or defeat. However, due to multiple uses, references, and definitions, the exact meaning of stress remains ambiguous. Terms typically associated with stress are anxiety,

frustration, strain, conflict, and tension. People also think of stress in terms of pressure situations, uptight feelings, nervousness, personal demands, and other unpleasant encounters.

Stress, however, is not only unpleasant or negative but positive as well. The Chinese, for example, have two characters representing stress, one signaling danger and the other opportunity. Like the Chinese representation, stress today encompasses both distress (bad or unpleasant) and eustress (good or pleasant). Through slurring, the Old French and Middle English word "distress" came into common English usage as stress. For purposes of this Bulletin, a general definition of stress will be: any action or situation that places physical or psychological demand on people. Divorce is stressful, but so is marriage. Both work and play are stressful. Vacation, often thought of as a stress releaser, is a primary producer of stress in America. Psychiatrists and marriage counselors testify that their busiest time is the first week in September, when broken families drag themselves home after the grueling "family vacation" [40].

While it becomes clearer what stress is, it is also important to know what stress is not. As already indicated, it is not just the well-publicized "executive stress," but a disease which afflicts teachers, secretaries, principals, superintendents, and custodians alike. Stress is not merely nervous tension, nor is it always the result of physical harm. For example, "a passionate embrace can produce considerable stress without causing adverse effects." Finally, stress is not something to be avoided: It is the spice of life, for without it people would die.

IV. How Do People Respond to Stress?

When animals are threatened, they respond by coiling to strike, roaring to frighten, stalking to attack, or chirping to alert.

People, however, with their sophisticated social skills sharpened, bottle up the natural physiological responses to stressful situations. Managers, for example, are expected to appear calm at all costs, tightening the lid on socially unacceptable reactions.

The stress on administrators today is likely to come from an irate parent, unruly kids, or a tenacious teacher, all who require diplomacy and finesse. The acceptable response is not to strike, attack, roar, or even disgruntedly peep, for the battle of people is fought with no more tangible weapons than the art of persuasion or compromise. This forced calm, however, builds repressed rage without any adequate target [27]. Administrators are forced to keep their natural responses bottled up inside until they can later go out and kick the dog, or "kick the bucket" as the actual case may be.

Research conducted on responses to stress is based on the examination of two categories of reactions: psychological and physiological. While each response is distinct in itself, they are also indirectly related to one another. The psychological response ranges from annoyance to rage, amusement to ecstasy. Physiological reactions to stress can be no more than an increased heart beat, but as shown in the next section, even this can be a contributing factor to coronary heart disease.

Since physical reactions have received the most attention in studies and from scientists, only a quick review of the physiological reactions will be provided. A slightly more in-depth investigation of the psychological responses (encompassing both emotional and behavioral reactions) will be conducted. It is first important, though, to understand how people physically respond to stress-producing situations.

Physiological Response

Hans Selye postulates that the body's response to stress is non-specific [35]. This means that no matter what kind of stress

is created (from a flattering letter of recommendation or a scathing evaluation review), an alarm is sent out, without discrimination, to all organs of the body, producing a biochemical chain reaction. The brain organizes the body for its response to stress by stimulating the hypothalamus which adjusts the blood supply and relaxes the stomach, bladder, and intestines. It also activates the pituitary gland, which sends hormones to the thyroid and adrenal glands. The adrenal secretion monitors the liver, pancreas, spleen and large blood vessels, and builds up the supply of fuel while the thyroid gland increases energy production [40].

This internal biochemical response is translated by the body into what experimental psychologists call an orientation response. The typical orientation response to such stress situations as a public-speaking engagement or staff conflict might be such bodily reactions as dilation of the pupils, increased heart rate, stoppage of saliva, sweating palms, cold fingers and toes, increased muscle tone, acute hearing, and changes in breathing patterns. These and other physiological changes prepare people for action and are, in essence, nature's gift for stress adaptation. They have the effect of sensitizing people to acquire more information. They can also have an effect on the body by creating a rise in cholesterol, increasing blood pressure, or stimulating excessive glandular excretion. The physical consequences of frequent and prolonged stress reactions will be more fully addressed in a subsequent section.

Psychological Responses

If there is any validity in stress-related research, one of its conclusions is that there are basically four ways people psychologically respond to stress: 1) fight like a lion, 2) flee like a deer, 3) freeze like a pheasant, or 4) learn like a child. Whether they are stimulated by rational, unconscious, or conscious thought, all are valid means of reducing overstimulation and excessive stress.

Fight. Fight is basically a power-oriented response where winning or overcoming sources of resistance is of primary importance; standing up for one's rights, defending a position, or even winning on the racquet ball courts are examples of the fight response. The manifestations of fight in education are most evident in adversary situations. These situations range from bargaining at the table to debating alternative courses of action. Some people have an innate aptitude for the "give and take" of adversary encounters, but most individuals must serve a long and stressful apprenticeship before any proficiency can be noticed.

All fight responses constitute a tremendous psychological drain. The longer and more frequent the duration of such behavior, the greater and sooner the exhaustion.

Flee. People also respond to stress by fleeing or avoiding the stress agent by a number of defense mechanisms--rationalizing away a problem, escaping an unpleasant experience through fantasizing, or withdrawing from an uncomfortable situation. These and other commonly used stress-reducing defense mechanisms are basic components of the flight response repertoire. Signs of these responses within the educational setting show up in staff turnover, sick leave, unfinished projects, or overdelegation.

The flight response helps block out more stress than a person is able to handle at any particular time. In some situations, this may be very functional and productive. However, in other situations the flight behavior may be highly inappropriate and may only serve to aggravate the problem. An example of this might be budget reports that are due but tend to be put off week after week, creating more and more stress until finally confronted.

Freeze. The third psychological response to stress is to freeze, better known in the sports world as "choking." Choking is what the free-throw shooter sometimes does when the outcome of the game depends on the last basket. Educators see it quite frequently

in the form of students blanking out on important examinations, interviewees unable to respond to simple questions, or when a person who is spontaneously called upon to give a speech in front of a prominent audience loses his or her voice. In all these circumstances, self-preoccupation with the stress agent (a test, interview, or speech) produces a mental "paralysis by analysis." Many times the stressful anticipation of an event proves to be more stressful than the event itself, thus producing performance paralysis which does not enable a person to do anything but freeze.

In sum, four propositions can be forwarded about the fight, flight, and freeze responses. First, everyone uses them to some degree. Second, if used too often, they become overpowerful tools, resulting many times in inappropriate behavior. Third, due to their overuse, they many times leave people less able to cope with stressful situations. Finally, these responses are most appropriate when they are used on a short-term basis to allow people to develop more productive and pro-active mechanisms for coping. Therefore, while the use of these responses protects people from overchallenging and stressful situations, attempts should be made to become more aware of their uses and to rechannel energy into more productive, long-term means of coping.

Learn. The final psychological response to stress, learning, is unique to human beings. It enables them to control the outcome of a stress-producing situation in an effective and constructive manner. Furthermore, in contrast to the three previous responses, it leaves people better able to cope with stressful situations in the future. Fight, flight, and freeze can be viewed as temporary, immediate, and many times unconscious and innate reactions. The mastery of stress by learning, on the other hand, is a process for managing future stress rather than inappropriately responding to the present [7].

The learning response is preventative rather than remedial, which involves some uncertainties and may in itself generate stress.

The learning response, however, is not viewed as the only and immediately most effective response pattern people have. Many times a strategically placed defense mechanism or fight behavior will help them cope with the present so they can get on with the future. The learning response has the potential of equipping people to effectively cope on a long-term basis. The final section of this Bulletin will deal directly with learned coping responses.

In sum, the physiological and psychological stress responses are never simple, though they sometimes appear to be. This, however, is largely due to an incomplete knowledge of the stressor itself and of the way people respond to it. Response is a highly personal matter, in many ways depending on how each person observes the stressor. The old adage, one person's poison is another's cure, definitely holds true here. While one administrator may thrive on such activities as writing reports, another may lose nights of sleep and exhaustive amounts of energy just in anticipation of such a task.

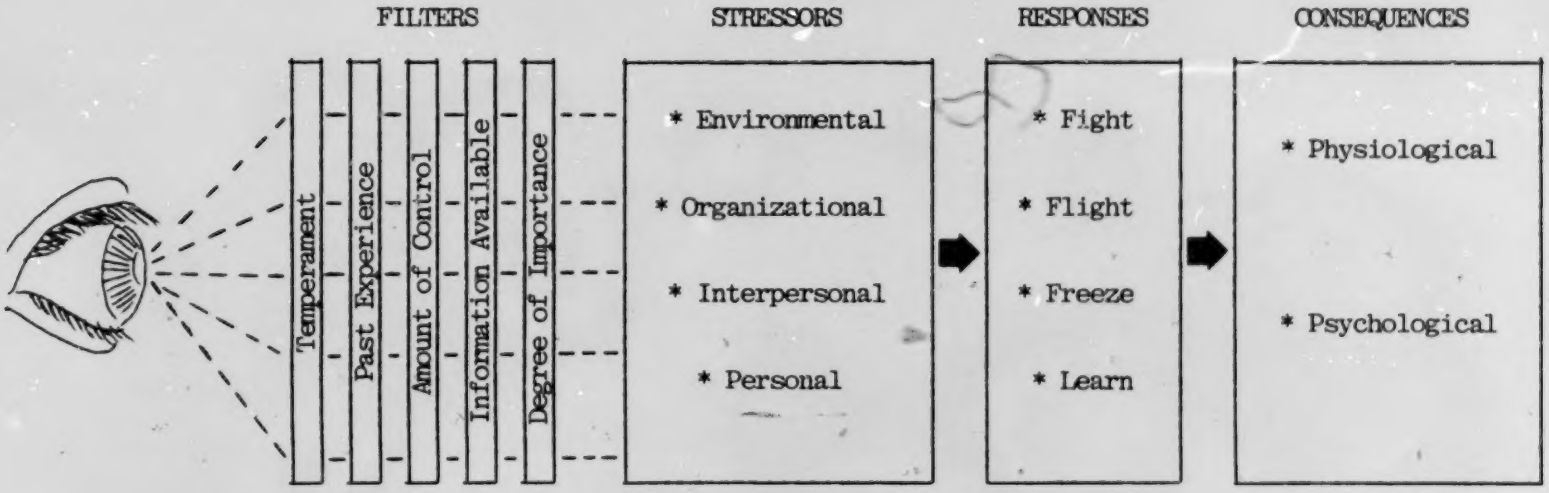
The Stress Filter System

What makes one situation mild to one administrator and traumatic to another? It essentially depends upon how people perceive the situation. Figure 1 outlines the stress filter system. The impact of a stressor depends on how people view it through their filter system, which is much like looking at the world through rose-colored glasses.

Personality or a person's temperament or constitution for handling tension and anxiety is one filter. Another filter is past experience in dealing with similar situations. The information a person has about the stress event also functions as a stress filter. Another filter represents the notion of control; the more control over the situation, the less stress is likely to be produced. A final filter is represented by the perceived importance of an event.

Figure 1

STRESS FILTER SYSTEM



For instance, if the potential stressor is irrelevant to a person's values or goals, its presence may not lead to feelings of frustration. However, if the stressor blocks the realization of an important goal, stress will most probably ensue. Other filters can be identified and are a very personal matter; no one set of filters can be considered universal.

As the stress filter system suggests, the intensity of stress reactions depends on how people perceive the four basic sources or levels of stress, called stressors: 1) the work environment which includes overcrowding, the buzz of phones, heat, cold, etc.; 2) the organization which includes work overload and role conflicts; 3) interpersonal conflict in daily relationships; and 4) stress-reducing/producing personalities. In turn, the intensity and severity of stress responses (fight, flight, freeze, or learn) depend on the filters used in looking at these stressors.

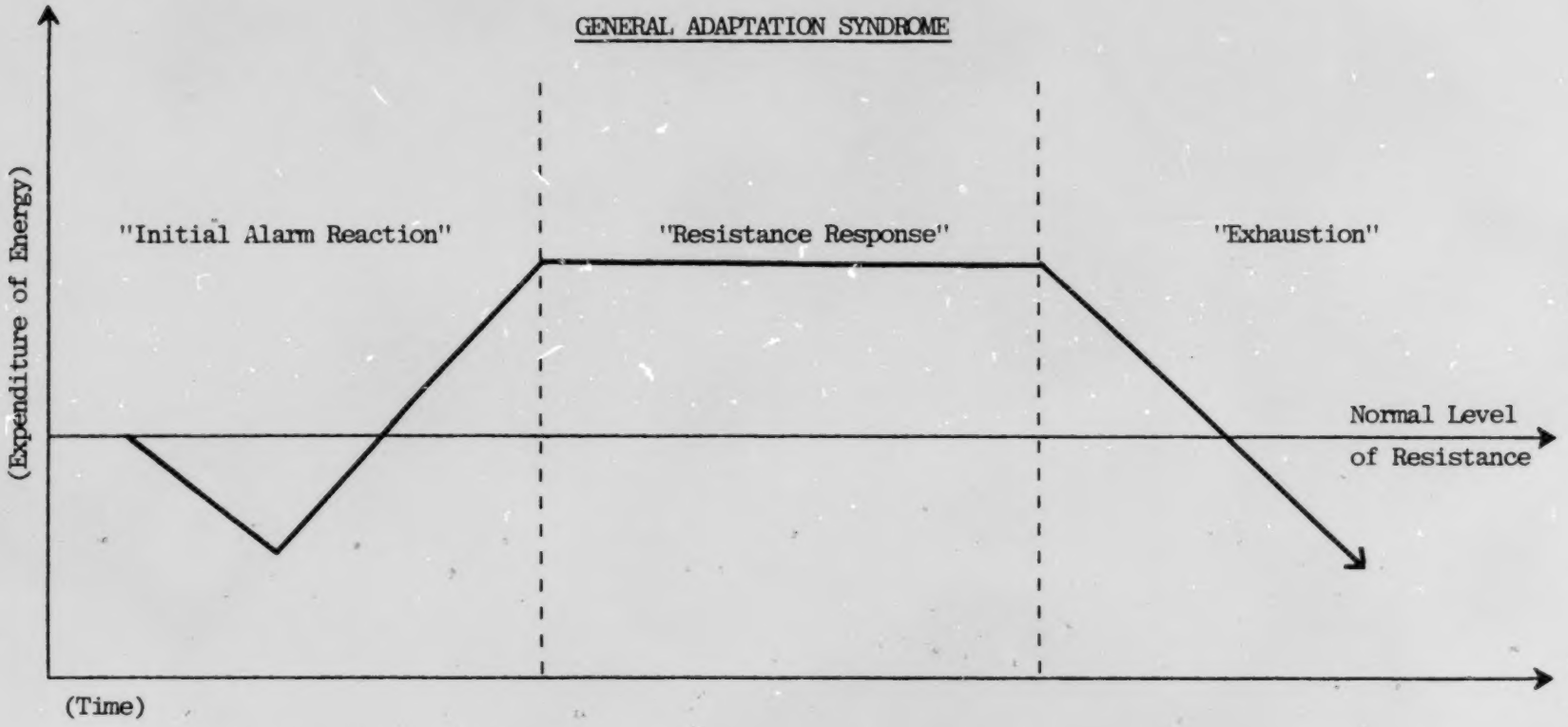
Stress Syndrome

To this point three immediate and urgent responses to stress have been introduced: fight, flight, and freeze. These, however, only represent one phase of what Hans Selye calls the General Adaptation Syndrome or G. A. S. (illustrated in Figure 2). G. A. S. is tri-phasic in nature starting with the initial alarm response, continuing through the stage of resistance, and finally terminating with the stage of exhaustion [35]. The initial phase represents a surprise reaction at the introduction of the stressor, primarily due to a person's inexperience or inability to deal with the new situation. The physiological response is basically a varying mixture of alertness, anticipation, curiosity, and fear, setting off a search for new information and solutions.

As the stressor persists over time, a person's body enters the second stage, that of resistance. At this stage there is a search for other ways of resolving problems. It is also at this stage that

Figure 2

GENERAL ADAPTATION SYNDROME



STAGE I

- Orientation Response
- Biochemical Reaction

STAGE II

- Fight
- Flight
- Freeze
- Learn

STAGE III

- Incompetence
- Senility
- Death

people often make important discoveries or are inspired to great performances or other productive consequences, all of which result from the "challenging goad of stress." It is here that people learn to cope with the problem effectively and efficiently.

As tension mounts and people are exposed longer and longer to the unresolved problem, they are led to the final stage where the depletion of their adaptive energy results in exhaustion. People enter this stage when information piles up faster than the mind can process it and there is no apparent solution.

In more graphic terms the three stages of stress can be thought of as build-up, blow-up, and fold-up. Looking at stress in this manner, there is the realization that most people cannot sustain the building up of tension over long periods of time without reaching some breaking point and blowing up. As their ability to control and cope with these breaking points deteriorates, they finally regress to a state of complete exhaustion and fold up.

Each person in essence possesses a fixed store of adaptive energy or vitality upon which to draw in responding to stress. It is like the world's supply of petroleum resources--once it is used up it cannot be replenished. As people spend their resources, signs of aging and fatigue appear. Even though people have different thresholds of stress due to their unique filter systems, there still comes a point in all of their lives when they succumb.

The tri-phasic stress syndrome functions many times during the day, and in its most general sense, throughout a person's life. According to Selye, the three stages are analogous to the stages of a person's life: childhood with its characteristic low resistance and excessive responses to any kind of stimulus; adulthood where ability to resist and cope increases; and finally, senility which is characterized by irreversible adaptability and eventual exhaustion ending in death [35].

The end of a person's professional life, however, may prematurely arrive before retirement or death. How many educators are "physically alive but professionally dead"? As Sylwester points out, "they may be at the top of the salary scale, drawing into themselves all the physical energy the school can bestow on staff members to keep vital . . . to no avail, they continue to live as human beings, but are dead as educators." [39]

What implications does the stress syndrome have for students, staff, and administrators alike? Don't people tend to start the school year with an initial alarm response, draw on their energy and vitality to get them through the stage of resistance, and finally collapse at the end of the term or school year? How about the instructor who initially stimulates students to expend hours of energy and time studying, then keeps the stress levels up artificially throughout the term by injecting them with mid-term examinations, quizzes, and papers, a process which eventually culminates in the students' exhaustive efforts on the final examination or project?

Most people cannot sustain such tense situations for long without a cathartic draining of energy. If Selye is correct, the longer administrators and teachers continuously keep stress levels high with mid-term evaluations, examinations, and such, the sooner and more severe will be the school's state of exhaustion. Hopefully, prudent reasoning and self-control will allow people to gain a better understanding of the inherent stressors in schools and of what might be done to reconstruct an environment that would lead to the enhancement of all. For instance, instruction and evaluation could be segmented into smaller, more manageable units through mastery learning, instructional modules, or other techniques which do not subject people to long, continuous pressures. The inspection of our schools should be conducted along these lines of inquiry to ferret out the traditional and stress-producing premises upon which school systems are built.

V. What Are the Consequences of Stress?

Research shows that under mild stress people tend to increase their performance. According to psychologist E. Paul Torrance, behind the many achievements of great artists lies the facilitating factor of stress [40].

Although a moderate amount of stress is said to help in reaching peak performances, when stress mounts people sometimes enter the dangerous zone where counterproductive symptoms occur. Psychologically they become confused, disoriented, irritable, irrational, and at the point of no return, apathetic and emotionally withdrawn [36]. After all, a principal can only put out so many brush fires before eventually burning out. It is at this point that stress becomes a most powerful and elusive enemy, playing a major role in a variety of illnesses.

Over thirty years ago scientists at the Association for Research of Nervous and Mental Disease generally agreed that stress increased the chances of developing many illnesses [41]. However, the debate centered around psychosomatic illness, or the degree to which the mind contributes to physical ill health, continues. Beyond the purely physiological illnesses such as botulism where physical factors are extreme and psychological factors nil, a vast range of diseases related to stress have been identified by physicians and researchers which may be arranged on a continuum from purely physiological to purely psychological. Exactly where many of these diseases are placed on the continuum is many times a factor of subjective judgment. Nevertheless, researchers have shown a very strong causal relationship between stress and cancer, heart attacks, ulcers, mental disease, asthma, hypertension, arthritis, and everyday backaches and headaches.

With some of these illnesses the relationship between stress and actual physical symptoms is clear, while with others the

association is often only suspected or unproven. Research has shown, however, that stressful events have a deleterious effect on a person's body, using up adaptive energy and making the person susceptible to common disorders. The most visible suggestions of this causal relationship are pronounced by the illnesses inflicted upon Betty Ford, Judy Agnew, and Madame Pompidou, which all occurred a few weeks after their spouses took office. Even more notable, former President Nixon's phlebitis set in after the pardon (after his target for fighting had disintegrated), Warren Harding's lethal attack occurred only six months after the Teapot Dome scandal, Lyndon Johnson's poor health correlated directly with his ineffective Viet Nam decisions, and Joe McCarthy's bout with cancer occurred only a few months after his public reckoning.

Other cases could be cited. But what about people in general? What are the visible effects of stress on their health? The same degree of stress may produce different lesions in different people. Each person has a different threshold to seemingly similar stress situations. Some are born tougher than others and will survive longer. Others have a low stress threshold and will succumb sooner.

Even though all parts of the body are equally exposed to stress, the weakest link breaks down [35]. A person's weakest link may be visible through hereditary traces of heart attacks, kidney diseases, diabetes, and other illnesses. To an even lesser extent it may show up in daily lives as migraines, backaches, and tense neck muscles. There are no vaccinations for stress diseases; a person cannot become immunized. Only the length of time and the symptoms of stress are different; in the end, everyone breaks down.

Good or bad, stress is here to stay, brought to new heights by the twentieth century psyche. Every historical epic, Henry E. Sigerist postulates, can be traced by its characteristic ailments: the Middle Ages were dominated by the Great Plague and leprosy ills of the common people; the Renaissance was characterized by syphilis;

the Baroque Era was marked both by deficiency diseases such as scurvy and luxury diseases such as gout; the Romantic Period was linked with tuberculosis and similar ailments; and the nineteenth century--with rapid industrialization and the development of cities--brought about general nervousness and neuroses. And now there is the twentieth century where tension headaches, high blood pressure, and peptic ulcers keep pace with the Dow Jones average and where the oscillation of the economy can be traced by the ebb and flow of tranquilizer prescriptions [16].

But why has stress become such a problem in the twentieth century--the age of comforts and conveniences? Some believe that this is, in part, a result of the loss of social and spiritual supports--specifically, the loss of religious faith, deterioration of the nuclear family, the surge for independence from others, and the constant change and challenges of our traditions and customs--which helped people of earlier times during hardship and suffering.

People often look to physicians for a cure for stress-related diseases. They must recognize, however, that the cure is often within themselves. Illness is not necessarily created by a germ, but by a change in relationship to the germ [22]. While a fatty diet, cigarette smoking, and lack of proper exercise pose a threat to good health, John Fench, Jr. maintains that even if people could perfectly control their cholesterol level, blood pressure, smoking, glucose intake, and so on, they still would only control about 25 percent of coronary heart disease [27]. A much more significant culprit is being able to cope psychologically with stress and, as pointed out in the next section, being able to regulate the impact of change in life.

Change, Stress, and Illness

One of the major factors contributing to twentieth century stress diseases is a future-shocked society where people experience

too much change in too short a time, where home is a place to leave or a place to keep up with the Joneses, where technology feeds upon knowledge and knowledge expands at a phenomenal rate, and where even friends do not last [41]. Change often brings prosperity, but, according to Holmes and Rahe, any event which changes life pattern or style also creates stress.

Over a period of 25 years Holmes has identified and refined 43 common stress-producing experiences in life, including changes in family, occupation, personal relationships, finance, religion, health, and residence [18]. Holmes and Rahe associate a weighted number from 100 to 11 with each event according to its stress-producing potential. Numerous medical studies have indicated that the total number of life change units (LCU's) is predictive of changes in a person's health. For instance, if you accumulated between 150 and 199 LCU's last year, you may fall into the category Holmes and Rahe call a mild life crisis in which there is a 37 percent chance of appreciable change in your health during the following year. A LCU total of 200 to 299 places you in a moderate life crisis category where the odds are 50-50 that changes in health will occur. When your LCU count shoots above 300, your chances are 4 in 5 that your pace of life last year will soon catch up with you, since 79 percent of the people Holmes and Rahe studied in this category succumbed to illness.

As you read down the list of events in Table 1 and add up your score, keep a few points in mind: first, both pleasant (marriage) and unpleasant (divorce) life events can cause harmful stress; second, no one can escape, nor would they necessarily want to escape all these crises, since to some degree stress <u>is</u> life; and, third, due to people's personalized stress filter systems and different coping abilities, the same event does not have the same impact on all individuals.

Table 1

SOCIAL READJUSTMENT RATING SCALE*

RANK	LIFE EVENT	MEAN VALUE
1	DEATH OF SPOUSE	100
2	DIVORCE	73
3	MARITAL SEPARATION	65
4	JAIL TERM	63
5	DEATH OF CLOSE FAMILY MEMBER	63
6	PERSONAL INJURY OR ILLNESS	53
7	MARRIAGE	50
8	FIRED AT WORK	47
9	MARITAL RECONCILIATION	45
10	RETIREMENT	45
11	CHANGE IN HEALTH OF FAMILY MEMBER	44
12	PREGNANCY	40
13	SEX DIFFICULTIES	39
14	GAIN OF NEW FAMILY MEMBER	39
15	BUSINESS READJUSTMENT	39
16	CHANGE IN FINANCIAL STATE	38
17	DEATH OF CLOSE FRIEND	37
18	CHANGE TO DIFFERENT LINE OF WORK	36
19	CHANGE IN NUMBER OF ARGUMENTS WITH SPOUSE	35
20	MORTGAGE OVER $10,000	31
21	FORECLOSURE OF MORTGAGE OR LOAN	30
22	CHANGE IN RESPONSIBILITIES AT WORK	29
23	SON OR DAUGHTER LEAVING HOME	29
24	TROUBLE WITH IN-LAWS	29
25	OUTSTANDING PERSONAL ACHIEVEMENT	28
26	WIFE BEGINS OR STOPS WORK	26
27	BEGIN OR END SCHOOL	26
28	CHANGE IN LIVING CONDITIONS	25
29	REVISION OF PERSONAL HABITS	24
30	TROUBLE WITH BOSS	23
31	CHANGE IN WORK HOURS OR CONDITIONS	20
32	CHANGE IN RESIDENCE	20
33	CHANGE IN SCHOOLS	20
34	CHANGE IN RECREATION	19
35	CHANGE IN CHURCH ACTIVITIES	19
36	CHANGE IN SOCIAL ACTIVITIES	18
37	MORTGAGE OR LOAN LESS THAN $10,000	17
38	CHANGE IN SLEEPING HABITS	16
39	CHANGE IN NUMBER OF FAMILY GET-TOGETHERS	15
40	CHANGE IN EATING HABITS	15
41	VACATION	13
42	CHRISTMAS	12
43	MINOR VIOLATIONS OF THE LAW	11

*from Holmes, T. H. and Rahe, R. H., Journal of Psychosomatic Research: Volume II, 1967, p. 216, Table III

What was your score? Over 300? If so, don't let this fact alone become a stress producer. The Social Readjustment Scale does not mean the same to each person. According to many scientists, the LCU-illness relationship is suspect due to sources of measurement error (selective memory--either for purposes of denial or illness justification), genetic influences, personal perceptions as to what is truly stressful, and differences in people's abilities to cope [33].

Your score should be used as an indicator that perhaps something should be done to alleviate or postpone any major events contemplated for the near future. Adaptive energy is depleted when a person has to cope with several stress-producing events during the same year. Since there is a finite store of energy from which to respond to these situations, the LCU total generally indicates the amount of energy a person would typically use in a year coping with total life changes.

Naturally, some people are more susceptible to changes, stress, and illness than others. An example is the principal who, due to outstanding performance (28 LCU's), was offered a superintendent position (36 LCU's) with new job responsibilities (29 LCU's) and a large salary increase (38 LCU's). This promotion also may have precipitated moving into a new area (20 LCU's), buying a new home (30 LCU's) with a large mortgage (31 LCU's), many changes in living conditions (25 LCU's), and social (18 LCU's), church (19 LCU's), and recreation activities (19 LCU's). At this point the needle has already moved into the danger zone (296 LCU's). To this add a particularly stressful vacation and our principal-superintendent may be in for a serious change in health.

Does all this sound a little exaggerated? Not so, for in a recent sample of administrators new to their position, 70 percent had already reached the moderate to major life crisis state--in fact, one colleague in his second year of administration totaled

547 LCU's last year. Have they all fallen ill? No, at least not categorically, but those with less ability to cope with stress are cognizant that this year may not be the best time to consider another major change in their lives.

Still unaccounted for is the everyday sensory bombardment people subject themselves to by reading sensationalized newspapers, watching violence on television, and breathing polluted air. The assassination of President Kennedy, for example, triggered a veritable epidemic of minor disorders [22]. The gamut of day-to-day stressors from a person's environment, work life, and personal interactions will be briefly covered in the next section.

In sum, all people, to some extent, are caught in a great paradox, for life depends on growth, growth creates change, change consumes adaptive energy, energy is finite, and when energy is exhausted, people fall ill. To eliminate change would be to eliminate self-development and life, for change is not only necessary to life, it is life.

Thus far in this Bulletin we have defined stress, looked at how people respond to it, and reviewed the mental and physical consequences of exstress. The next section will identify sources of stress, clarifying the pressure points within a person's environment, work place, interpersonal relationships, and psyche. The Bulletin will conclude with strategies for reducing stress within a person's administrative arena.

VI. What Are the Sources of Stress?

What is a person's first stressor? Nearly two thousand years ago an emperor of China posed a similar question to his physician: "Does not the troublesome wind cause illness?" [22] Whatever the language and wherever the place, nature--through the forces of

wind, cold, and heat--has brought about tension, depression, headaches, and other illnesses.

Even more catastrophic than the stresses of nature are those created by people themselves. These stresses are found in all aspects of life--in the environment, as a part of a person's job, by working with people, and within a person's own disposition. The four levels--environmental, organizational, interpersonal, and personal--in Figure 3 represent potential areas of stress.

The levels of stressors, descending from environment down to personal idiosyncrasy, will be reviewed in that order. This sequence is more expedient than real since significant stressors can attack at any level, in any direction, or in an unpredictable manner, shifting from level to level. As you read through each succeeding section, become cognizant that stress is cumulative; although one disturbing event during the day may not be enough to reactivate an ulcer, a series of stressors over a short period of time (or several prolonged stressors) becomes synergistic and calamitous to your productivity and, even more important, to your health.

Stress seems to intensify as people move down through the various levels, eventually becoming prisoners of their environments, work, colleagues, and their own dispositions. Locked in as stress prisoners, the only salvation for people is to begin to get control over their lives and to learn the strategies of coping.

Level 1: Environmental Stressors

Many of the stressors of the environment are so commonplace that people are unaware of their impact. Temperature, wind, rain, and changes in weather have already been disclosed as contributors. In overpopulated schools there are crowds to maneuver through, lines to stand in, seats to fight for, faceless bureaucracies to deal with, and meaningless noise to listen to, all culprits of stress attacks.

Figure 3

LEVELS OF ADMINISTRATIVE STRESS

These observations are supported by representative studies showing the relationship of stress to seating arrangements, room design, territorial behavior, noise density, etc. [25]. Noise, for example, plagues people in shops, P. E. classes, recesses, lunch periods, and machine-riddled offices, producing serious side effects such as dizziness, decreases in gastric functions, visual disabilities, fatigue, headaches, and nausea. One study reported that children living in high noise areas had their ability to learn to read impaired [40]. Within the working world, high noise levels have had adverse effects on job performance, absenteeism, accident rates, and turnover. The cost is appalling, both in health and capital. Industries' losses, according to World Health Organization estimates, exceed four billion dollars a year.

Yet not all noise causes adverse consequences. Much depends on how it is perceived. The sound of children playing happily together outside is like music to a parent's ears, but when such frolic is transferred to a quiet library setting, a different response takes over. Noise generally is most stressful when inappropriate or unpredictable [40].

Office furnishings can also create more discomfort than ease. The placement of a person's desk, for instance, is crucial. By unconsciously locating the desk in the middle of the room (putting it between a person and his or her visitors), psychological distance is created and a superordinate-subordinate relationship is implied; obviously this is not conducive to relaxed interaction. Sitting behind the desk in an orthopedically unsound, cushiony executive swivel chair for sustained periods tends to aggravate an already aching back. Even working all day under fluorescent lighting, according to researchers, creates more tension and fatigue than lighting approximating morning sunlight [16].

Probably the most stress-producing office practice is the open-door policy--the belief that as public employees, other people own

a person's time. This notion was reinforced in a recent article by a deputy superintendent of public schools who suggested that "an efficient and effective organization has an open-door policy . . . when the door is open, even when other people are present, anyone is welcome." [38:54] The spirit of that policy may be better construed to mean that people should be accessible, but not incessantly available to all. Physically leaving the door open is, according to time management expert Alec Mackenzie, a standing invitation to corridor wanderers [23]. The result is an incrementally interruptible day which eventually wears down a person's patience. "The trouble with patience is, the more a person has, the more folks want to use."

In sum, the stresses of environment are not so much a matter of the stressors themselves, but of a person's ability to control them.

Level 2: Organizational Stressors

Organizational stress is characterized by factors which reflect the organization itself (size, number of levels, rules, etc.) as well as by other factors which relate to position and interaction of people (role conflict, job ambiguity, etc.).

Organizational stress levels, which are not the same for all organizations, vary from school to school and district to district. Using business organizations as an example, Dun's Review listed ten companies which produce more than their share of stress:

1. Revlon, Inc.: Tops on most lists due to competitive nature of the cosmetics industry and extraordinary demands placed on employees by the chief executive.
2. International Telephone and Telegraph: Dismissal of about 100 executives by chairman and more dismissals to come should austerity persist.
3. Chrysler Corporation: Enormous company losses and entrance of new management.
4. Singer Company: Company struggling to restore operating losses and chairman difficult to live with.

5. Ernest and Julio Gallo Wineries: The former a hard-driving chief executive who insists on superior performance or discharge.

6. Wachovia Corporation: North Carolina bank holding company (only 36th in the nation in assets) which hires the brightest, but there is short-lived security if productivity is not proven.

7. Procter and Gamble Company: The in-house competition is fierce; company is in a competitive industry.

8. Johnson and Johnson: Company competition within, people struggle to get to the top—or out.

9. Crane Company: A copper company whose chairman is unreasonable and always insists on miracles.

10. W. R. Grace and Company: An old shipping line now diversifying and placing unrealistic demands and time constraints on managers [48].

As evidenced above, the list of high-stress companies includes both troubled and profitable companies, just as there are successful and unsuccessful school districts which are stressful. The key, whether in business or education, is recognizing precursors of organizational stress: competition, lack of security, unreasonable demands, dismissals, financial instability, new management, hard-driving management, unrealistic performance standards, and so on. The list in education is not much different, with perhaps the exception of outside competition. Specifically what makes one school more stress engendering than another depends on the predominance of several properties: work overload, underwork, job ambiguity, organizational structure, role conflict, managing people, travel, and the nature of educational changes. The evidence indicting these properties is given below.

1. Work Overload: Having "too difficult" or "too much" work to do creates stress, the former being qualitative overload and the latter quantitative overload [12]. Constantly having to work fast, working excessive and inconvenient hours, and having tasks "over one's head" all contribute to poor mental and physical health.

Qualitative overload is indicated when discrepancies between educational preparation and positions in the organizational hierarchy have been noted as causing stress. In one study, a group of middle-class background, college-educated men hired as managers experienced less illness than a second group of men who had not completed college but were promoted to managerial positions. Similarly, Cornell University researchers found more illness among workers whose family and education were inconsistent with their occupation than among people whose social background and aspirations coincided with their employment [10].

Quantitative overload has been significantly related by researchers to a number of symptoms or indicators of stress: cigarette smoking [13], escapist drinking, absenteeism from work, and lowered self-esteem [5]. For example, people with more phone calls, office visits and meetings smoke significantly more cigarettes than people with fewer commitments.

In sum, work overload, both qualitative and quantitative, has been shown to produce at least a dozen different symptoms: job dissatisfaction, lower self-esteem, increased feelings of being threatened, increased drinking, absenteeism, lower motivation, embarrassment, more smoking, increased heart rate, higher cholesterol levels, and job tension.

2. Underwork: Relieving overwork by doing less sometimes provides an agreeable release but in the long run being underworked leads to dissatisfaction, doubting of one's abilities, and demoralization [21]. Although there is little research evidence supporting the "underload" hypothesis, Tobias Brocher, psychiatrist for the Menninger Foundation's Educational Programs on Human Behavior, contends that most frustrations of young administrators stem from unfulfilling or unchallenging jobs, not work overload [45]. Regardless of the scientific verdict, it is sometimes evident that an unfulfilled need for achievement causes job tensions.

3. Job Ambiguity: All too often, administrators are left unclear about the scope of their responsibilities; they simply do not know where their job begins and where it ends. They find themselves in an ever-expanding role, continually facing increased demands from the public. With the advent of collective bargaining, accountability, fiscal controls, contract management, new state and federally mandated programs, and the increasing number of court decisions affecting schools, job responsibilities have become ambiguous and excessive.

Inadequate information about job responsibilities, scope, and objectives, as well as colleagues' expectations contribute to stress indicators of depression, low self-esteem, life and job dissatisfaction, futility, and intention to leave the job [10].

4. Organizational Structure: Another potential source of stress is the structure itself: the presence of hierarchies, lack of participative decision making, and omnipotence of rules. The idea of hierarchies basically comes from the old Prussian army organization where a chain of command was essential to instill order in times of warfare. The twentieth-century behavioral scientist Chris Argyris contends, however, that it is unnatural to have people stacked up atop one another in an organizational pyramid [2]. This is especially true in professional organizations such as hospitals, universities, and public schools and, in fact, the number of hierarchial levels positively correlates with job tension and conflict. One study indicated that 83 percent of the staff experienced a great deal of dysfunctional conflict when there were six to seven levels between teachers and supervisors, contrasted with a 14 percent indication of conflict in an organization with only three levels between teachers and supervisors [31].

Research relevant to education's recent interest in team management centers around the issue of decision making. According to the Goddard study [13], employees with greater opportunities to

participate in decision making experienced higher feelings of self-esteem and job satisfaction and lower feelings of job-related threat. Another study reported that non-participation was the most consistent and significant predictor of stress and strain on the job [24]. Under more autocratic chief executives, managers felt pressure and strain because they were not able to complete the work in their own way [8].

With respect to organizational structure and stress-producing conflict, a number of research findings suggest that: 1) the more heterogeneous a staff, the greater the conflict (people like to be together with others of similar background and interests); 2) the greater the degree of staff specialization, the greater the conflict (specialization encourages competition between departments); 3) the higher the interdependence among people, the greater the conflict; 4) the closer the supervision, the greater the conflict; and 5) the greater the organizational structure in terms of rules, the less the interpersonal conflict and the greater the intrapersonal conflict [31]. Given this evidence, as John W. Gardner wrote, there are No Easy Victories.

5. Role Conflict: Members of school organizations may hold quite different role expectations of, for example, a principal's position. If these expectations are different from the activities that are being performed by the principal, that person will experience a psychological conflict. This conflict often occurs when simultaneous expectations are placed on a person and the compliance of one expectation would make it difficult to satisfy the other. A superintendent, for instance, may make it clear to the principal that he or she is expected to closely supervise the teaching staff; the teachers, on the other hand, feel supervision should be loosely administered because they are all professionals.

The consequences of role conflicts are evident. Being torn between two groups expecting different kinds of behavior psychologically

manifests high tension and low satisfaction [20], and physically contributes to coronary heart disease and ponderosity (excessive weight for age and height) [37].

6. Managing People: Managers typically spend their days behind desks talking to, writing, and calling others. Moving from these managerial and professional occupations to work involving physical activity decreases the incidence of stress-related illnesses (e.g., coronary heart disease). This is partially due to the physical inactivity of management positions, but is more likely related to educational managers' "responsibility for people." Being responsible for people means attending meetings, interacting with others, adhering to deadlines, fulfilling personal commitments, and faithfully executing reports, memos, and projects . . . all which involve people. This line of work leads to a higher rate of heart attacks than work where a person is responsible for things (equipment, supplies, budgets, etc.) [43]. Responsibility for people as opposed to inanimate objects is also significantly related to heavy smoking, diastolic blood pressure and serum, and high cholesterol levels, all of which are stress warning signals [13].

7. Travel: In Oregon the average school administrator typically lives in the community where he or she works, drives a short distance to the office, and proceeds through the day in a familiar routine. Interrupting this day-to-day pattern with conferences, workshops, or day-long meetings often provides an exciting and stimulating alternative. Once the distances from conferences become greater and out-of-town meetings become more frequent, these changes become an irritant to stable daily routines. With the advent of more efficient modes of transportation and mechanization, people are expected to be in more places and to do more than ever before.

8. The Nature of Educational Changes: The Confederation of Oregon School Administrators (COSA) and the Oregon School Boards Association (OSBA) have recently pointed out that administrators

are under great stress. This pressure is due to educational changes since the 1960s: " . . . involvement by students in decisions that affect them, growth of citizen activism, increasing pressure on school districts for basic changes as a result of federal-state laws and regulations, the advent of employee militancy, and the increasing effort on the part of employee groups to control the decision-making process through collective bargaining . . . " [9:1]

The preceding eight organizational stressors are not exhaustive, nor are they reported in high to low stress-producing order. Others could be added. During a University of Oregon class on human resource management, small groups of students, teachers, superintendents, and elementary and secondary principals did, in fact, indicate their top five sources of stress (Table 2). Within the top five stressors listed for all groups was interpersonal relations--conflict with parents, teachers, students, other administrators, or self. Time (the lack of it and its organization) and coping with "administrivia" (meetings, schedules, bureaucracy, and paperwork) were also identified as prominent sources of stress. A more systematic approach toward collecting this information is presently underway by the Oregon School Study Council.

Level 3: Interpersonal Stressors

The third level of stress, interpersonal, is so evident and common it does not need much explanation. Administration is essentially the art of identifying and resolving conflicting situations--both positive and negative. If conflict resolution is an integral part of management's job, then the job by definition must be stressful [21]. People must become accustomed to the notion that where people work together in structured settings, stress will exist.

Good working relationships, according to several behavioral scientists [2, 17, 10], is a significant factor in organizational and individual health. A healthy work relationship is one which is

Table 2

PROMINENT SOURCES OF STRESS

SUPERINTENDENTS AND CENTRAL STAFF	SECONDARY ADMINISTRATORS	ELEMENTARY PRINCIPALS	TEACHERS	(COLLEGE) STUDENTS
1. Inter/Intra-Personal Relations: Conflict with parents, teachers, board of education, self	Decision Making: Constant, every day	Staff: Motivation, evaluation	Inter-Personal Relations: Unresolved staff conflicts	Time: Deadlines for exams, papers
2. Communication: Lack of feedback, public relations, the press	Inter-Personal Relations: With students, teachers, parents	Inter-Personal Relations: Discipline within the law	Administrivia: Paperwork	Employment: Job search
3. Administrivia: Meetings, evaluations, schedules, bureaucracy, paperwork	Time	Negotiations	Leadership: Autocratic principal	Financial Support
4. Time: Doing too many things at the same time	Power: Responsibility with limited authority	Budget: Preparation, restraints, passage	Staff Meetings	Administrative Procedures
5. (Not Indicated)	Change: Initiating and implementing	Communication: Vertical, horizontal	Teacher Rights	Inter-Personal Relations: Student-teacher

supportive, trusting, and cooperative [20]. Several studies found that mistrust and role ambiguity led to poor communication and psychological strain [10]. Another study concluded that a considerate supervisor can serve as a stress reliever for staff members [6].

Level 4: Personal Stressors

The same sources of stress provoke different reactions in different people. A person's susceptibility to stress is determined by both genetic and developmental characteristics [26]. A great deal of research has been conducted in trying to determine the relationship between different people's dispositions and their consequent vulnerability to stress-related illnesses. A classic experiment conducted twenty years ago by two research cardiologists, Meyer Friedman and Ray Rosenman, found that a group of tax accountants' cholesterol levels rose as the April 15 tax deadline approached and fell after the deadline passed. Friedman and Rosenman maintain that there are distinctive "Type A" and "Type B" personalities, the former type being more susceptible to high blood pressure and increased cholesterol levels which contribute to the ultimate stress-related illness, coronary heart disease [15].

People exhibiting Type A behavior are typically aggressive, competitive, impatient, hostile to frustration, and possess a strong sense of time urgency. Environmental challenges always seem to act as a trigger to explosive Type A behavior. Type B's are exactly the opposite; they are rarely harried, able to relax without feeling guilty, and work without agitation.

Who are the Type A's? Middle-class business executives? Not necessarily so. Type A behavior is common among all occupations, ages, classes, and sexes. In fact, 60 percent of the people Friedman and Rosenman studied were classified as Type A personalities [40].

Are Type A's more successful than B's? Do they tend to hold high positions in their organizations? Once again Friedman and

Rosenman believe that most high-level executives are not necessarily Type A's. In fact, many executives reach their levels of success through steady, confident, secure Type B behavior. Former President Ford, for example, was classified by Friedman as a Type B.

It is true that Type A people work hard and fast to succeed, constantly set and strive toward goals, and are highly achievement-oriented, pushing themselves to near capacity. But while they may receive their rewards, they live by dangerously unhealthy rules and the odds are three times greater for them that coronary heart disease will be the ultimate victor.

Are you a Type A? Do you characteristically exhibit Type A behavior? Quickly fill in the following questionnaire to see [32].

Yes	No	Don't know		
___	___	___	1.	I'm frequently in a hurry.
___	___	___	2.	I'm typically doing several projects at the same time.
___	___	___	3.	I'm always pushed by deadlines.
___	___	___	4.	I usually take on as many (or a few more) projects as I can handle.
___	___	___	5.	I really seek recognition from my boss and/or peers.
___	___	___	6.	I believe it's important for a person to push herself or himself for success, and I seek out opportunities for promotions and advancements.
___	___	___	7.	I enjoy competition in all areas.
___	___	___	8.	I really enjoy winning, and hate to lose.
___	___	___	9.	My job is the most important thing in my life.
___	___	___	10.	I sometimes feel I neglect my family by putting my job first.
___	___	___	11.	I'm usually too busy with my job to have time for many hobbies or outside activities.
___	___	___	12.	When I'm given a job I really feel personally responsible for its success--i.e., even though others may be involved, I feel that it just won't come out as well unless I'm personally involved from start to finish.

Yes	No	Don't know		
___	___	___	13.	I have trouble trusting people easily.
___	___	___	14.	I tend to talk fast.
___	___	___	15.	When speaking I believe in giving special emphasis to my meaning with strong vocal inflection and gestures.
___	___	___	16.	I feel some impatience in most meetings and conversations--I just wish they would speed up and get on with it.
___	___	___	17.	I tend to get irritable and lose my cool easily when obviously simple things don't go right.
___	___	___	18.	I make a list of things I must get done each day.
___	___	___	19.	I generally have strong opinions on most things.
___	___	___	20.	I don't seem to get much time to keep up with my reading.

If you answered yes to fifteen of these questions, you may be falling into the "Type A" behavior pattern.

Similar to Friedman's Type A person is the "Driver," described by Harold Mosak as a person in constant motion, a "workaholic," an overachiever, and a person whose work is never done [42]. Both Type A's and Drivers bring much stress on themselves, and are constantly plagued by the ills of "exstress."

A person's behavior, however, is not totally to blame; to some extent a person's total work environment encourages and rewards the Type A/Driver employee. Stressors from the environment, organization, and interpersonal levels are constantly bombarding people with norms that encourage competitiveness, indispensability, aggression, and immediacy. A school with a high stress-level potential is not necessarily an undesirable place to work; however, administrators in such an organization should probably be particularly careful about monitoring their own stress.

The same types of questions asked about personalities need to be asked about work environments. Try responding to the questions posed in Table 3. Do not add up your scores, but look for emerging patterns which, when combined with a Type A behavior pattern, spell tension, pressure, and pain.

Table 3

ASSESSING POTENTIAL STRESSORS

ENVIRONMENT:

Agree	Disagree		
____	____	1.	My school/office is too crowded.
____	____	2.	It sometimes gets too hot or cold in my office.
____	____	3.	The lighting is inadequate.
____	____	4.	My school/office is abnormally noisy.
____	____	5.	The furniture and/or equipment doesn't facilitate relaxation and easy interaction with others.
____	____	6.	Telephones and other interruptions frequently stop what I am doing.
____	____	7.	My door is usually open to drop-in visitors.

ORGANIZATION:

(Overload)

____	____	8.	Most tasks have unrealistically short deadlines.
____	____	9.	There seems to be a sense of urgency about all tasks.
____	____	10.	My responsibilities are difficult to keep up with.
____	____	11.	There is constant pressure to work every minute with little opportunity to relax.
____	____	12.	I frequently spend evenings and weekends finishing my work.

(Underload)

____	____	13.	My job is seldom challenging.
____	____	14.	I frequently find my work boring and repetitive.

____ ____ 15. My work has little variety.

____ ____ 16. I seldom feel a sense of accomplishment because I cannot see the final product of what I do.

____ ____ 17. I am given very little responsibility.

(Job Ambiguity)

____ ____ 18. My job responsibilities are generally vague, unclear, and inconsistent.

____ ____ 19. There is very little opportunity to receive feedback on how I am doing.

____ ____ 20. My goals and objectives are intangible and not clearly spelled out.

(Organizational Structure)

____ ____ 21. I have little direct contact with my supervisor.

____ ____ 22. I have little input into the policies I have to implement.

____ ____ 23. An overabundance of rules and policies do not give me the freedom to make my own decisions or use my own ideas.

(Role Conflict)

____ ____ 24. I am often caught between conflicting demands from my supervisor and staff.

____ ____ 25. I often feel pressure both to spend more time at work and more time with my family.

____ ____ 26. I often have difficulty deciding between high productivity and high quality.

____ ____ 27. I sometimes feel I have to do things to succeed in my work which are in conflict with my basic values.

(Managing People)

____ ____ 28. I am too often meeting with colleagues and do not have enough time to myself.

____ ____ 29. My job rarely entails getting vigorous physical exercise.

____ ____ 30. I sit most of the day and try to get tasks done by other people.

____ ____ 31. I rarely have the opportunity to manage rational, logical, and objective things (equipment, budgets).

(Travel)

____ ____ 32. My job frequently takes me out-of-town while the work piles up on my desk.

____ ____ 33. I find that I am expected to travel greater distances more frequently to committee meetings and conferences.

____ ____ 34. Due to travel demands, my daily routine and family time are frequently interrupted by having to get up early or arrive home late.

____ ____ 35. I find it difficult to keep up with the readings in my area of specialization.

____ ____ 36. New laws and regulations frequently require me to change my way of doing things.

____ ____ 37. I find I have to develop new management techniques and skills to keep pace with changes in education.

INTERPERSONAL LEVEL:

____ ____ 38. My colleagues seldom get together socially.

____ ____ 39. I frequently have to confront students and staff members on an individual basis.

____ ____ 40. My colleagues and I seldom talk together about personal problems.

____ ____ 41. We more often compete with one another than cooperate with a feeling of team spirit.

____ ____ 42. I generally do not get along well with those whose opinions differ greatly from mine.

In sum, central to the diagram of "Levels of Administrative Stress" introduced at the beginning of this section is a person's unique susceptibility (Level 4) toward other stressors (Levels, 1, 2, and 3). A person's susceptibility is important in determining his or her responses to environmental, organizational, and interpersonal stressors. These potential sources of stress are always present, but it is the interaction of stressors which determines whether a situation will be stressful or not. The four levels of

stressors can be thought of as independent spheres constantly in motion, overlapping at times and at other times isolated. If the levels of stress shift so that no overlap exists between the "personal" and any of the other three levels, no physical or psychological reactions will occur (See Figure 4, Part A). It is, therefore, the interaction between the personal and other levels which determines stressful behavior (See Figure 4, Part B).

VII. How Do People Cope with Stress?

Managing stress is mainly the process of converting tension from an enemy to an ally, from a needless stressor to a creative motivator. Stress becomes an enemy when there is too much or too little of it. Research evidence supports the notion that the relationship between the degree of stress and the degree of effective performance is curvilinear [1] (Figure 5). It is the abnormal loads of stress at both ends of the scale which cause problems. When jobs become boring and unchallenging, additional stimulation may be needed to increase the stress level for optimum effectiveness. On occasions of overstimulation there is a need to enter a "decompression chamber" to lower the stress level and return to the optimum performance zone. Since most managers would place themselves in the overstimulation zone, it is here that the emphasis on coping will be placed.

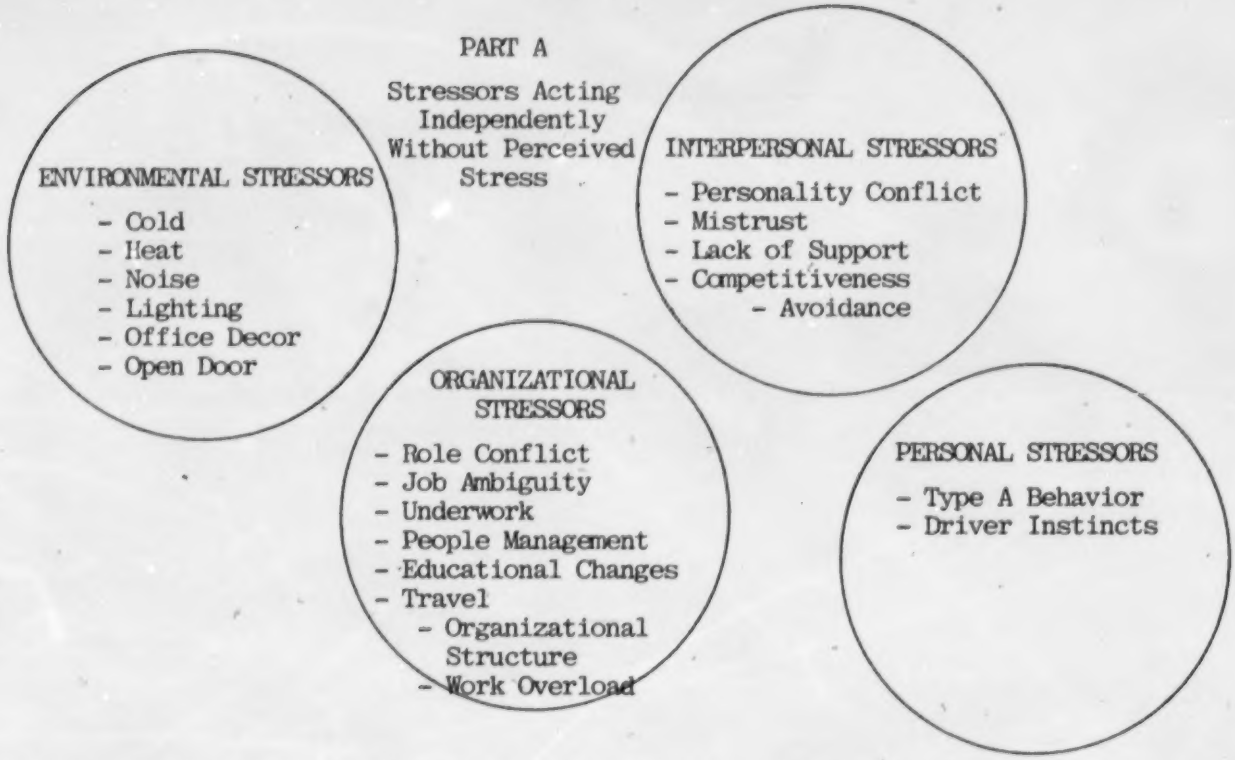
Three elements are crucial in either enhancing or hampering a person's ability to cope: time, control, and personal disposition. Coping is a process that requires time for its achievement. A driver speeding through life seldom has enough time to effectively negotiate sudden turns, detours, or bumps along the road. The dawdler at the wheel, however, has better use of perceptual vision and time to evaluate alternative courses of action and to plan the path ahead.

Figure 4

STRESS LEVEL INTERACTION

PART A

Stressors Acting Independently Without Perceived Stress



PART B

Synergistic Stressor Interaction with Perceived Stress

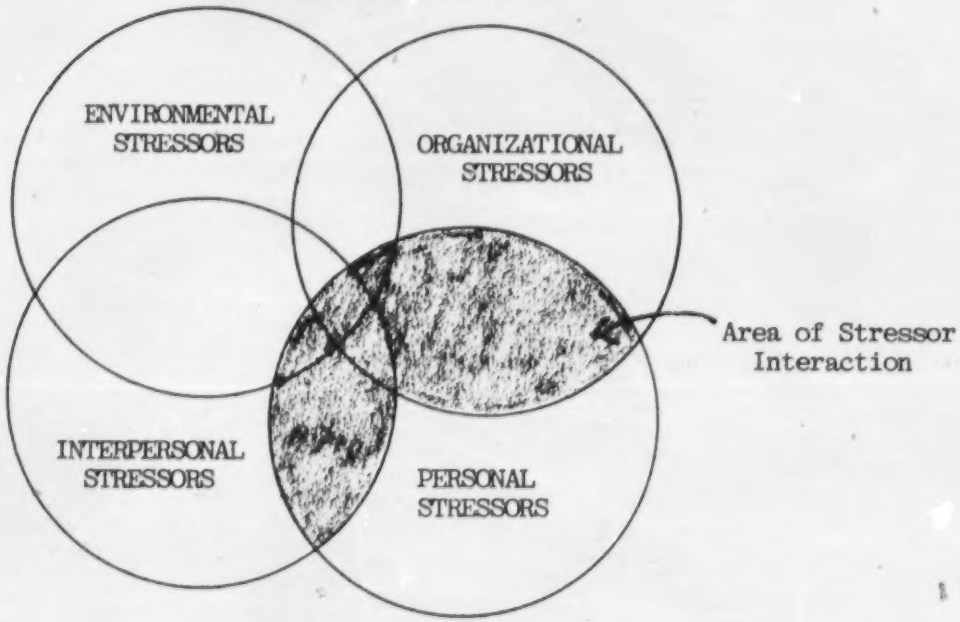
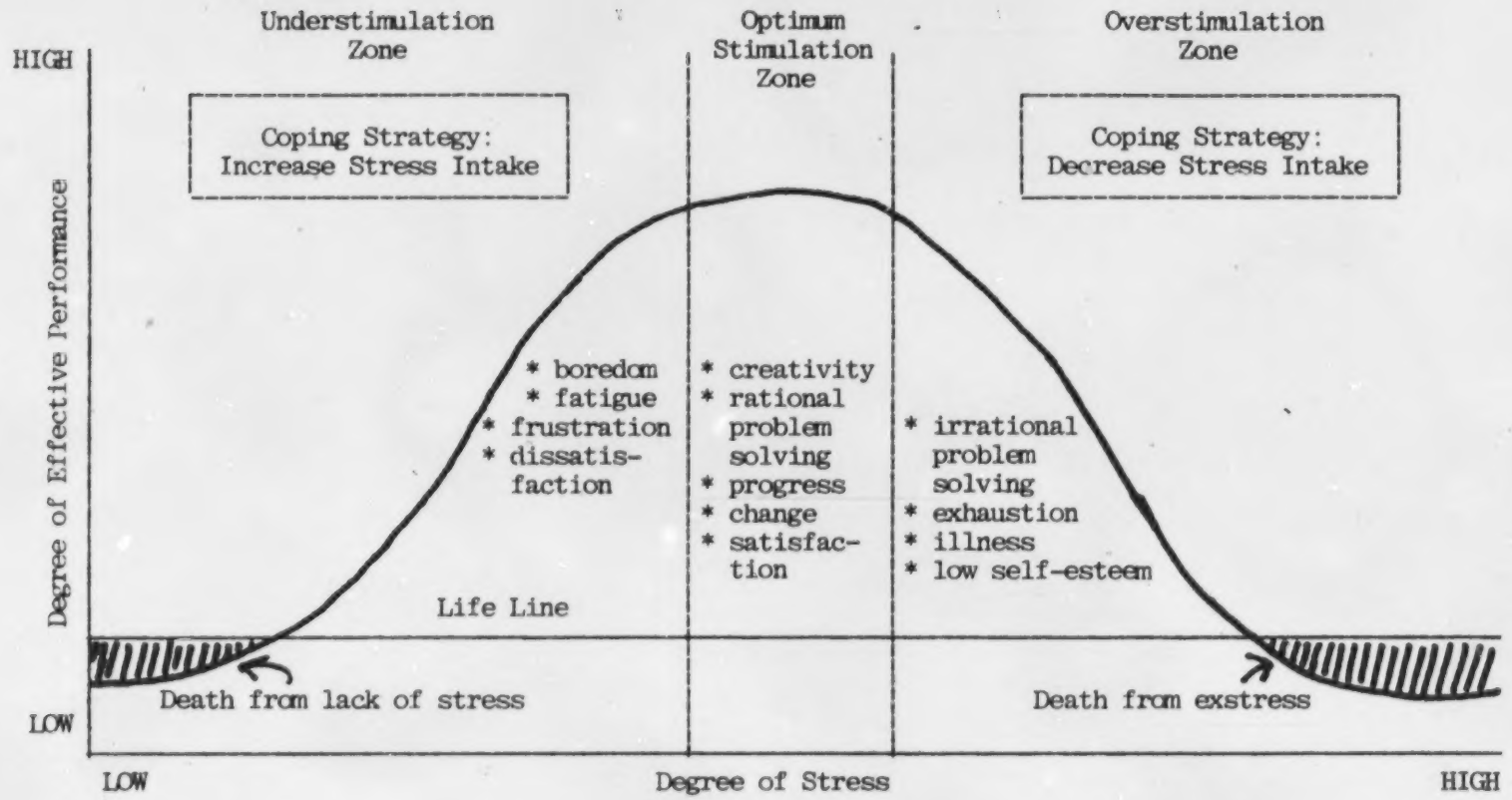


Figure 5

STRESS AND PERFORMANCE



Control over the duration and intensity of stress has implications for effective coping. Studies of commuters in the San Francisco Bay Area bear out the relationship between stress and control. The most stressful event for one executive (measured by an increase in pulse rate) was not coping with the trials of business, but "driving to and from work--dodging cars, competing for position, getting caught helplessly in traffic--situations over which there was no control." [40:50] To a great extent, it is not the magnitude of the stressor itself which seems to count but the amount of control a person has over the ability to cope.

Coping abilities are largely dependent on personality and become a part of a person's character or personal disposition. People who are quiet tend to become even more withdrawn when under stress and anxiety. Others who are talkative respond by becoming more verbal as stress levels increase. While there is a general tendency for coping abilities to closely associate with personal disposition, there is also some potential for learning and developing new coping skills. It would seem that the more skills a person adds to his or her coping repertoire, the greater the flexibility and versatility in facing pressures, and hence, the greater the ability to manage stress effectively.

Cornerstones for Coping

A necessary precursor to managing stress is to first recognize the need to do something about it. People must perceive that a problem exists before they can approach its resolution. The next step is to make the situation visible by identifying the causes of excessive stress. A self-diagnosis of stressors using Table 3 is a beginning. In one sense, however, those responses only represent a person's perceptions of his or her own stressors. It may be well for a person to ask staff and colleagues to share their perceptions. Another way of making stress visible is to become sensitive to the

bodily cues received from excessive stress. Paying attention to stiff neck muscles, upset stomachs, and beginning headaches helps in recognizing early warning signals to the onslaught of stress.

Half of the problem in reducing stress is admitting that there is a problem and identifying the stress agents. Having done this, a person can begin to look for helpful coping techniques. The search for such methods usually begins with consulting experts in the field. People consult Benjamin Spock when they have a problem with their child, Erich Fromm when there is a problem with their love life, and Meyer Friedman when their stress life is involved. After all, the expectation is for Spock to be a good father, Fromm to be a good lover, and Friedman to be a good Type B. Unfortunately, experts tend to write about their hang-ups as consistently as other people consult them about theirs. Meyer Friedman freely admits that his transformation from Type A behavior to Type B came only after his heart by-pass surgery.

There are no simple solutions to the problems created by undue stress. What a person reads, experiences, and tries all provide helpful insights. Just making the effort often provides new and better ways of managing lives. Friedman has some suggestions, however, as do Daniel Miller, the Menninger Foundation, and Robert Page (See Table 4).

The ability to cope is a very personal matter. What works best for some people may not be the answer for others. Some research efforts have been made to dichotomize coping into effective and ineffective techniques [19]. Such normative distinctions, however, tend to view a very complex process too superficially or simplistically.

To end the discussion by saying that there are no recognized coping techniques applicable to almost all people would be misleading and unjust in a paper on administrative stress. A few methods which should be helpful to educational managers are briefly outlined

Table 4

WHAT THE DOCTORS SAY

FOR THE TYPE A'S

Meyer Friedman, once a Type A himself, suggests 10 ways to cut down on stress:

1. Plan some idleness every day.
2. Listen to others without interruption.
3. Read books that demand concentration.
4. Learn to savor food.
5. Have a place for retreat at home.
6. Avoid irritating, overly competitive people.
7. Plan leisurely, less-structured vacations.
8. Concentrate on enriching yourself.
9. Live by the calendar, not the stop watch.
10. Concentrate on one task at a time. [15]

A DO-IT-YOURSELF MENTAL-HEALTH CHECKUP

The Menninger Foundation suggests that administrators take time now and then to ask themselves:

1. What are my goals in life and how realistic are they?
2. Is my use of time and energy helping me to reach these goals?
3. Do I have a proper sense of responsibility or do I try to do too much and fail to acknowledge my limitations?
4. How do I react to disappointments and losses?
5. How am I coping with stress and anxiety?
6. What is the consistency and quality of my personal relationships? Are my contacts with others superficial, meager, and unrewarding?
7. From whom do I receive and to whom do I give emotional support? Do I avoid getting support from others for fear of appearing weak?
8. What is the role of love in my life? How much time do I give to listen to and care for others? [45]

STEPS TO STRESS REDUCTION

Daniel Miller, President and Director of New York City's Strang Clinic (a preventative-medicine institute) outlines steps for executives who want to reduce stress:

1. Regular program of physical activity or other leisure pursuits.
2. Lunches away from the job with conversation centered on non-job-related matters.
3. Taking time for humor. We take ourselves and jobs too seriously.
4. Involvement in outside activities which provide personal satisfaction. [45]

MAKING STRESS YOUR ALLY

Robert Page, an international medical consultant to government and industry and formerly General Medical Director for Standard Oil Company, suggests how to redirect executive stress:

1. Intelligently schedule a full day's or week's activities.
2. Push a little "over the top" to achieve short-ranged, stimulating, concrete goals.
3. Make opportunities to perform activities at which you are good.
4. It is important to earn your moments of relaxation so they can be wholly satisfying.
5. Get into nonvocational activities at which you can do well. [29]

below. References on each technique are listed in the supporting bibliography.

1. Learn to cope with stress through managing time. Of the stressors faced by administrators, none is as pervasive as the stress of time. Setting time aside daily for the organization and planning of tasks helps substitute "blocked-off" periods of contemplative thought and rational problem solving for the fragmented administrative life. Other techniques that control the open-door paradox, constant telephone interruptions, and drop-in visitors can also be helpful.

2. Manage by objectives, not by pressure. Establishing clear, detailed objectives helps to eradicate many of the ambiguities of administration and eliminates confusion by giving a definite sense of direction. The day will not be muddled through haphazardly if objectives are prioritized daily so that important issues are addressed first. While objectives can reduce needless tension, timelines and due dates of goals also put people under strain. Hopefully, having a system of objectives will replace anxiety created by unplanned activities with "constructive" tension.

3. Build mini-vacations into the day. While people take time off for physical sickness, they never seem to find the time or reason to rest from mental fatigue or stress attacks. The need for relief may not always coincide with the 10:00 a.m. coffee break or TGIF parties, either. Although it seems absurd to the 65-hour, 5-days-a-week person, other people may need rest during the day or week.

Breaking the daily routine with a midday walk to clear the mind, a change in lunch schedules, a chat on the phone with spouse and kids, or a stroll through a nearby library or museum are healthy means of breaking the eight-to-five stress cycle. Frances Stern suggests that even people who sit at their desks can take a mini-vacation in their minds by means of meto-imagery or the constructive

art of daydreaming and fantasizing [47]. By re-creating pleasurable memories and recalling them at times of duress, people are actually able to decrease pulse rate, adrenalin flow, and blood pressure. Everyone needs a tension reliever now and then, whether they daydream or take a stroll. Those who see the mini-vacation as a waste of time are usually the managers most in need of help.

4. Re-educate your organization in the art of coping. In order to assist people in accepting and carrying out the challenges of education, administrators must accept responsibility for minimizing stressful incidents on others and for training them to cope with the tensions of the job. The purpose of training would be to modify and augment the individual's awareness and response repertoire. Ruddock in Six Approaches to the Person points out: "If under stress, a [person] goes all to pieces, [s/he] will probably be told to pull [himself/herself] together. It would be more effective to help [him/her] identify the pieces and understand why they have come apart." [34:94]

A stressor for which an employee is adequately prepared causes normal tension and a desire for action [21]. But, how can people prepare their staffs when they aren't equipped themselves? Perhaps this is an area where inservice and organizational development is needed. Several national centers such as the Menninger Foundation and New York City's Strang Clinic and Stress Control Center have been specifically designed for preventative medicine and anxiety training. However, there is no need to search far for help since some local communities in Oregon are presently conducting stress clinics. M. Roberts Grover at the University of Oregon's Health Sciences Center has developed a program featuring the "Stress Tank" which has been well received and appreciated by many stressful educational administrators throughout the state of Oregon.

The coping strategies outlined above serve only as an introduction. Others can be cited and should be explored. It is up to

each person to determine which strategy or combination of activities will provide the most effective daily outlet or defense for tensions and frustrations.

Stress Absorbers: Taking the Shock Out of Life

The secret of successful coping is not avoiding stress by leading a boring existence but learning to use adaptive energy wisely. Whether a person is exhausted or relaxed by the pace of a job depends on how he or she approaches the "stress of life." A person can either react to stimuli or build in proactive habits to deal with problems before they arise. To conclude this paper, four practices which can serve as stress absorbers to the shocks of life are suggested:

A. Know the limitations of administration. Few people know their own limitations, which is why "so few people live long enough to reminisce upon past accomplishments with happiness." [29:50] People need to learn to accept the fact that administration has its limitations. Changes cannot be made overnight and some changes cannot be made at all. Some circumstances are beyond a person's control. As the wise age-old adage suggests, a person should seek:

> The courage to change
> the things we can,
>
> The serenity to accept
> those we cannot,
>
> And the wisdom
> to know the difference.

Knowing what can be done in a set amount of time reduces the uncertainty of tasks and stressfulness of the job. Instead of recognizing Murphy's Second Law (everything takes longer than you think), managers generally attempt too much at once for too many people and set unrealistic time estimates [23]. Any one of a number of reasons contribute to this: lack of planning, oversense of responsibility, inability to set priorities, high need for

achievement, and misunderstanding of job responsibilities. What probably needs to be done is to promise a little bit less than is believed can be achieved.

Administrators, like Caesar, try to be all things to all people. They should be re-educated in the discipline of humanology which is the art of measuring the physical and psychological limitations and capabilities of people [29]. Only through planned self-analysis can they have any hope of reducing stress. Remembering past experiences in high school, college, and former occupations, administrators need to get in touch with what they did well, what not so well, what was frustrating, what was fun, what was challenging, what was boring, what created tension, and what provided fulfillment. Through such a process, many latent talents may be rediscovered as well as limitations unveiled. This new awareness will allow concentration on capabilities and delegation of limitations to those more qualified. A person who is weak in curriculum development should admit the shortcoming and hire a vice-principal or assistant superintendent who is strong in that area.

B. Establish and update life goals. Whether in business, industry, government, or education, almost all organizations emphasize the importance of management by objectives (MBO), but how many people live by objectives (LBO)? By state mandate all Oregon school boards must establish goals for their districts. Surprisingly, probably very few of the districts' leaders and managers have done so for themselves.

Delinquency in self-management contributes to the fact that half of all working people are unhappy with their careers. They discover too late that a change was needed long ago and that there is now neither the time nor the energy to undertake a redirection. Even in their early thirties, for example, many professionals are starting to question their worth and do not know if their upward striving was worth it or not [45]. More tragic are the accounts of

executives without any retirement programs to sustain their vitality and interest. A little poem reminds people so well:

If you hold your nose to the grindstone rough,
And hold it down there long enough,

You'll soon forget there are such things
As brooks that babble and birds that sing!

These three things will your world compose,
Just you, and a stone, and your darn old nose!

If I had life to live over, I'd pick more daisies.

C. Develop the ability to relax. People must work, but to do it effectively they must also learn to relax. If a problem stems from doing too much, then one response is not to do more, but to learn to relax as quickly and completely as possible. Americans' most frequent channel of relaxation is through anti-stress drugs such as tranquilizers--the top prescription drugs in the country [30]. The drawbacks of such a stress-reducer response are obvious: 1) The drug does not attack the cause but the symptoms--once it wears off the stressor may still persist, and 2) There is the danger that such an escapist response may become a physiological habit. Due to these and other negative side effects, people have recently searched for other relaxation techniques. Today many self-activated relaxation techniques--ranging from ancient eastern traditions to modern biofeedback machines--are used to disengage stress. Among the methods used are Transcendental Meditation, yoga, zen, Krishna, scientology, biofeedback, hypnosis, and relaxation response.

Herbert Benson, author of The Relaxation Response, developed a technique for inducing a deep relaxation for twenty to thirty minutes twice daily [3]. Benson suggested in the prestigious Harvard Business Review that every organization should do all its employees a favor by offering an alternative to the coffee break: the relaxation-response break [4]. A deluge of protest letters followed such an "outrageous" thought, declaring that stress and tension were essential elements in effective business management.

While relaxation response temporarily relieves tension, Transcendental Meditation goes further by preparing a person for orderly thought and action. The authenticity of TM as an on-the-job stress reducer has been supported by such large corporations as AT & T, General Foods, and the Crocker Bank of San Francisco. Transcendental Meditation is respected and popular among all age groups. According to research by Frew, TM has resulted in increased job satisfaction, higher levels of output, reduced absenteeism, and better working relationships among peers and supervisors [14].

The debate of pro-or-con meditation is not to be resolved here. The point is, if you're not relaxing you'd better develop the ability to do so. To test your ability, you might answer the questions in Table 5. If your score is low, "it's high time you did something about it." What you do exactly is up to you. If meditation is not your style, then midday siestas may be.

D. Develop a wholistic approach toward stress. A wholistic stress approach recognizes that both the body and mind must work in harmony toward the reduction of stress. This is not a new notion, for Plato in The Republic espoused that education of the mind and body produce harmonious development of human character. "The great error in the treatment of the body," Plato asserted, "is that physicians are ignorant of the whole. For the part can never be well unless the whole is well." [11]

Two thousand and five hundred years later, Kenneth Pelletier and others are reorchestrating the same theme--that the body, mind, and spirit must be viewed as a single unit rather than separate entities. Ever since the Middle Ages, however, the practice of healing has been divided among physicians for the body, psychiatrists for the mind, and clergy for the soul [30]. None of these approaches alone can cure stress-related illnesses. The wholistic philosophy, whether taken twenty-five centuries ago from Plato's Republic or in 1977 from Pelletier's Mind as Healer--Mind As Slayer,

Table 5

HOW WELL CAN YOU RELAX?

		Always	Sometimes	Seldom
1.	Are you able to shut out your worries when you go to bed at night?	____	____	____
2.	Are you able to take a nap during the day and awaken refreshed?	____	____	____
3.	Is your clothing well fitting and comfortable?	____	____	____
4.	Are you able to concentrate on one problem at a time?	____	____	____
5.	Do you plan your day's activities?	____	____	____
6.	Do you find time to relax and stretch during the day?	____	____	____
7.	Do you take time to relieve held positions required in your work to prevent a feeling of tenseness?	____	____	____
8.	When you feel yourself becoming tense because of sustained positions, do you know how to relax by doing simple movements?	____	____	____
9.	Do you check yourself frequently for habitual tension habits, such as scowling, clenched fists, tight jaws, hunched shoulders, or pursed lips?	____	____	____
10.	Do you relax these evidences of tension at will when you find them?	____	____	____
11.	Do you find it easy to relax so that you sleep easily and deeply?	____	____	____
12.	Do you know how to release tensions through simple movements so that you can sleep well?	____	____	____
13.	Do you play with such interest that you become completely absorbed in what you are doing?	____	____	____
14.	Do you plan your life to have a change of people, scenery, and thoughts?	____	____	____

TOTAL NUMBER MARKED: Always ____ Sometimes ____ Seldom ____

RATING:

Always--3 points
Sometimes--2 points
Seldom--1 point

SCORE:

33-42 points--high ability to relax
24-32 points--average ability to relax
15-23 points--low ability to relax

Sections of this chart were adapted from Janet Wessel, Movement Fundamentals. New York: Prentice-Hall, Inc., 1957, page 55.

supports the hypothesis that stress and illness result when "the parts of the whole" are in imbalance or disharmony.

Relaxation techniques previously discussed may help to keep the mind at peak efficiency under tension. For others, religion brings peace with oneself and a tranquility adequate to face life's trying experiences with quiet trust. But what about physical well-being? When a person is angry or upset, proper exercise can help tune his or her body to the right pitch. Engaging in long walks, playing golf, or withstanding a round of tennis serve to relieve tension and help in facing new problems from a more refreshed perspective.

Not all exercise, however, is therapeutic. Some people release pent-up aggression by violently competing in a tennis match, jogging to a clock, or beating a golf ball over the turf. Violent exercisers may develop other stress disorders from their sport such as racquet ball elbow, lower back pain, or possibly instantaneous death.

Meyer Friedman cautions that competitive handball, tennis singles, and squash follow right behind jogging as the most potentially lethal forms of exercise for Americans over thirty-five [15]. He suggests exercising gently at anything that gives a person pleasure. Plato is also called upon to share a last word of advice: "The ordinary athlete undergoes the rigors of training for the sake of muscular strength; but ours will do so rather with a view to stimulating the spirited element in their nature . . . " [11:100] The idea is to bring "the body and mind into tune with one another"—not to blow a fuse.

The stress absorbers and other techniques for coping are not meant to resemble recipes in a cookbook, for each person has unique ways of handling stress. The suggestions provided in this Bulletin are the beginnings of a smorgasbord of ideas from which people can select and sample according to their own tastes. Hopefully, the

author has succeeded in stimulating people's awareness of and thoughts on administrative stress. The answers rest with each person.

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